

**Work Order ID 60406**

July 7, 2010 10:01:02 AM



Page 1

Item ID: D2721-042

Accept



Setup Start



Revision ID:

Stop



Item Name: 206B Step Assembly

Start Date: 7/07/10 Start Qty: 2.00



Cust Item ID:

Required Date: 7/14/10 Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: CZ Date: 10/7/17 Tooling:

Date:

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2721	Rev C								

100

0.00



Large Fab

Large Fab

Memo

0.00

Large Fab

Cut D2721-2 using D2622 extrusion as per Dwg D2721  
Deburr and bevel ends for welding10.08.202φ

110

0.00



Large Fab

Large Fab

Memo

0.00

Large Fab

Weld end cap (One End Only) and lugs as per Dwg D2721 using Jig DT  
followed by Jig DT2φA/R AL Rod Batch: 112860  
114877

Grind end cap welds flush

10.08.20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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120

QC9- Inspect visual per QSI004- Fusion Welds

0.00



QC

Memo

0.00

Quality Control

D 10.08.24

130

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

S 10/08/24



140

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

2 10-8-24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Cust Item ID:

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Customer:

Reference:

Run Start



Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150  QC Quality Control	QC3- Inspect Part Finish  Memo	0.00  0.00		10/08/25			X2		
160  Large Fab Large Fab	Large Fab  Memo Inspect for foreign object per QSI 024 Weld Remaining end cap as per Dwg D2721 A/R AL Rod Batch: 11/2860 Grind End Cap Welds Flush	0.00  0.00		10-08-25		2			
170  QC Quality Control	QC9- Inspect visual per QSI004- Fusion Welds  Memo	0.00  0.00							

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 60406

July 7, 2010 10:01:02 AM



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Item ID:	D2721-042	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	206B Step Assembly					
Start Date:	7/07/10	Start Qty:	2.00	Cust Item ID:		
Required Date:	7/14/10	Req'd Qty:	2.00	Customer:		
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	
	QC:	Date:	SPC (Y/N):	Date:		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180  QC Quality Control	QC5- Inspect part completeness to step on W/O  Memo	0.00 0.00		S 10/08/25		12 RH			
190  HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1  Memo	0.00 0.00		=> M 10/08/26		X2RH			
200  Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum  Memo START TIME: 9:20 OVEN TEMPERATURE: 320° FINISH TIME: 9:50	0.00 0.00							2 10-8-26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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**NOTE:** Date & initial all entries



**Work Order ID 60406**

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Setup Start



Revision ID:

Stop



Item Name: 206B Step Assembly

Start Date: 7/07/10

Start Qty: 2.00



Cust Item ID:

Required Date: 7/14/10

Req'd Qty: 2.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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210

QC3- Inspect Part Finish

0.00

=) MU 10/08/26

x2

d



QC

Memo

0.00

Quality Control

220

Wing Walk as per dwg QSI005 4.4 Batch M115058

0.00

MU 10/08/26

x2

/



HandFinish

Memo

Hand Finishing

230

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

MU 10 08 26 (2)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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**NOTE:** Date & initial all entries

**Work Order ID 60406**

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Item ID: D2721-042

Accept

Setup Start

Revision ID:

Stop

Item Name: 206B Step Assembly

Start Date: 7/07/10 Start Qty: 2.00

Cust Item ID:

Required Date: 7/14/10 Req'd Qty: 2.00

Customer:

Reference:

Run Start

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Stop

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

240

Identify as per dwg &amp; Stock Location: \_\_\_\_\_

0.00



Packaging

Memo

PPP60405

0.00

Packaging

C/S 8/30 (2)

250

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/08/30  
CQ 10/8/30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





July 7, 2010 10:01:01 AM

**Parent Item Name:** 206B Step Assembly

**Required Date:** 7/14/10

**Required Qty: 2.00**

**Comments:** IPP Rev:F As Per Ecn 766 06-01-06 JLM IPP Rev:G add wing  
walk DD 10.02.24 verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2622-120C  Step Extrusion		Manufactured	No			100	Each	120.9200	1	2		10.08.20	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA				120.92					
					55214			3.92					
					58544			117					
D2734  Step End Plate		Manufactured	No			110	Each	15.0000	1	2		10.08.20	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA	360216			15					
					55014			15					
D3461-1  Mounting Plate		Manufactured	No			110	Each	54.0000	1	2		10.08.20	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA				54					
					41600			8					
					58756			46					
D3461-3  Mounting Plate		Manufactured	No			110	Each	11.0000	1	2		10.08.20	
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA				11					
					41601			11					

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

# Picklist Print

Page 2

July 7, 2010 10:01:02 AM

Work Order ID: 60406



Parent Item: D2721-042



Parent Item Name: 206B Step Assembly

Start Date: 7/07/10

Required Date: 7/14/10

Start Qty: 2.00

Required Qty: 2.00

D3461-5 Manufactured No

110 Each

27.0000

1 2



Mounting Plate



*10.08.20*

Location

Loc Qty

Loc Code

WA

27

33862

27

2

D3461-7 Manufactured No

110 Each

29.0000

1 2



Mounting Plate



*10.08.20*

Location

Loc Qty

Loc Code

WA

29

33863

29

2

D2734 Manufactured No

160 Each

15.0000

1 2



Step End Plate



*10.08.30*

Location

Loc Qty

Loc Code

WA

15

360216

15

55014

2

July 7, 2010 10:01:02 AM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

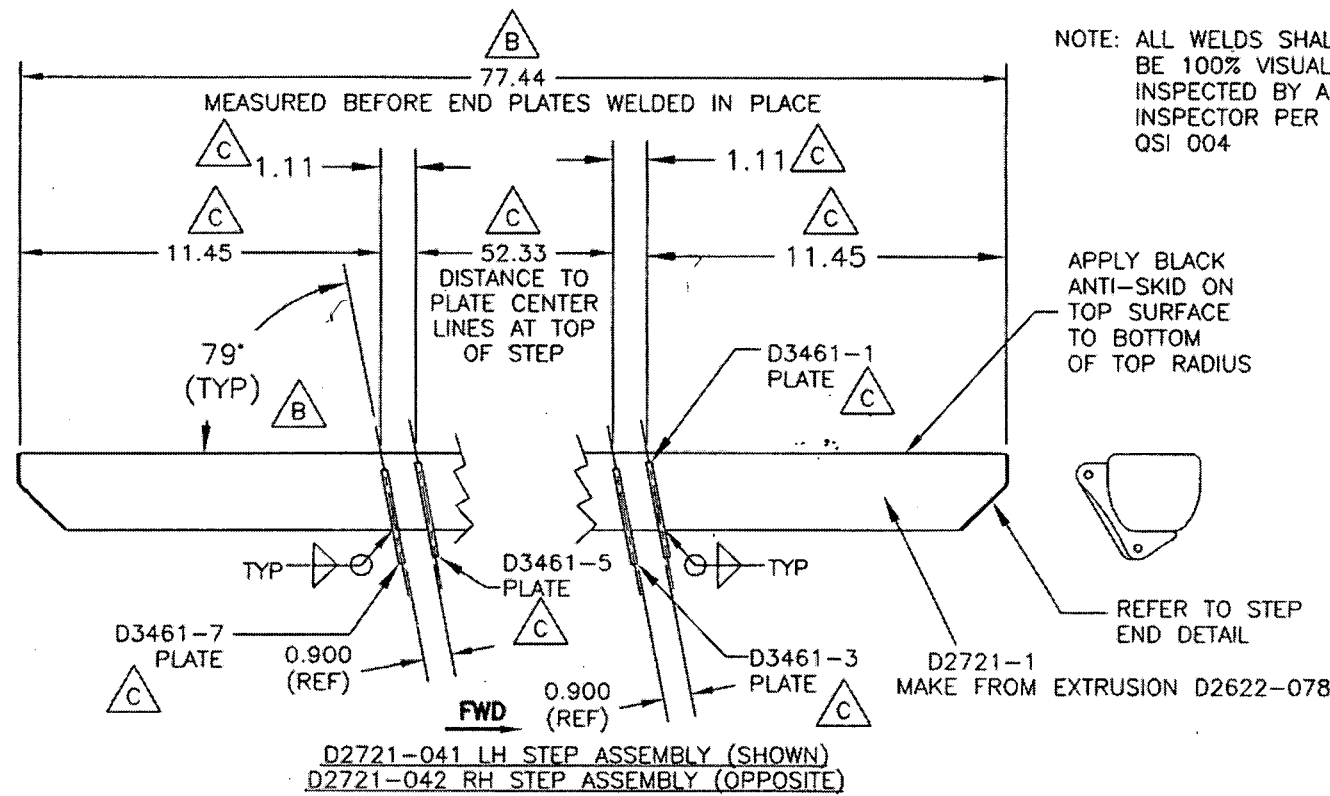
**NOTE:** Date & initial all entries



**DART**

RELEASED  
05.11.14

NOTE: ALL WELDS SHALL  
BE 100% VISUALLY  
INSPECTED BY A QUALIFIED  
INSPECTOR PER DART  
QSI 004



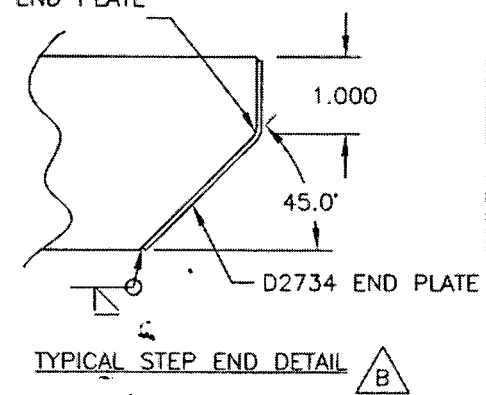
D2721-041 LH STEP ASSEMBLY (SHOWN)  
D2721-042 RH STEP ASSEMBLY (OPPOSITE)

ROUND CORNER OF EXTRUSION TO  
MATCH BEND RADIUS OF END PLATE

**D2721-041/-042 STEP ASSEMBLY PARTS LIST**

QTY	QTY	PART NUMBER	DESCRIPTION
-041	-042		
X	X	D2721-041	LH STEP ASSEMBLY
		D2721-042	RH STEP ASSEMBLY
1	1	D2622-078	EXTRUSION
2	2	D2734	END PLATE
1	1	D3461-1	PLATE
1	1	D3461-3	PLATE
1	1	D3461-5	PLATE
1	1	D3461-7	PLATE

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 60904  
C210/777



**D2721-041/-042 STEP ASSEMBLY**

- 1) MAKE FROM EXTRUSION D2622
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3  
APPLY BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) ALL TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

DESIGN	PH	DRAWN BY	PH	DART AEROSPACE USA, INC.
CHECKED	PH	APPROVED	PH	PORT HADLOCK, WA
DATE	05.09.19	TITLE	D2721	206B STEP ASSEMBLY
DATE	05.09.19	REV.	A	97.12.04
		REV.	B	98.10.19
		REV.	C	05.09.19
		SCALE	NTS	
		SHEET	1 OF 1	

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